Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

- 1. *Applicant/Contact name and address*: Wilderness Development, LLC, 3015 12th Street NE, Calgary, Alberta, Canada T2E7J2
- 2. Type of action: Application for Beneficial Water Use Permit 30027767-76D
- 3. *Water source name*: Groundwater from two drilled wells.
- 4. *Location affected by action*: Sections 28, 29, 32 and 33 in T 37N, R 27W, Lincoln County, Montana known as the Wilderness Club.
- 5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311, MCA are met. The applicant wishes to appropriate groundwater at a rate of 1,000 gallons per minute for irrigation purposes on 120 acres of golf course. Water will be pumped from one well and piped to a holding reservoir near the 8th hole where it will be stored until it is pumped by a secondary point of diversion into the impact sprinkler system. The second well will serve as a backup and will only be used if the primary well or pump fail. Water will be pumped for no more than 10 hours each day from May 15 through October 15 to fill the lined storage reservoir. The secondary system will be computer operated and will coordinate with a weather station and will only operate when needed.
- 6. Agencies consulted during preparation of the Environmental Assessment: (Include agencies with overlapping jurisdiction)
 MT DEQ, MT Historical Society, MT Natural Heritage Program and MT FWP website

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: The source is groundwater.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: The source is groundwater; however, continual fertilization of the golf course could have an adverse impact on the shallow aquifer in this area specifically Murray Springs.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: Both well were pumped at 1,000 gpm during the late fall of 2006. Draw downs in other wells were monitored in the area with minimal impacts. The applicant's consultant estimates that impacts could be seen as far away as 8 miles from this site. However, that impact would be .25 inches or less. No impacts to Lake Koocanusa are anticipated or measurable.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: The wells were drilled in November of 2006. The entire infrastructure has been completed.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: No impacts to species of special concern are anticipated by this action.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: NA

<u>Ponds</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: The action will utilize three lined ponds as water features and storage for the irrigation system. Water fowl could use these ponds, but Lake Koocanusa is only a short distance away.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: There is no known saline seep in this area. The golf course will be operated and maintained by a professional crew. Soil stability and moisture content should improve due to the nature of this development.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: The applicant is responsible for weed control on the property.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No impacts.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: No historic sites were identified on the property.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water, and energy not already addressed.

Determination: None were identified.

HUMAN ENVIRONMENT

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: This development was approved by the Lincoln County Planning office.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: No impacts.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: No known impacts were identified.

<u>PRIVATE PROPERTY</u> - Assess whether there is any government regulatory impacts on private property rights.

Yes___ No_X_. If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination:

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? Some impacts due to the golf course attracting people from outside this area.
- (b) <u>Local and state tax base and tax revenues</u>? Moderate improvements due to the amount of money and development this action will generate.
- (c) <u>Existing land uses</u>? Some impacts. This area was hay and pasture before the golf course was built.
- (d) <u>Quantity and distribution of employment</u>? This development should create new jobs for this employment depressed area.
- (e) <u>Distribution and density of population and housing</u>? This action should have no impact. Further development on a separate action will create population and housing changes.
- (f) <u>Demands for government services</u>? Some increase in demand for services.
- (g) <u>Industrial and commercial activity</u>? Slight if any.
- (h) Utilities? Some increase in demands
- (i) <u>Transportation</u>? Some impacts due to people driving and flying in to play golf on this course.
- (j) Safety? Increase traffic flows will cause some impacts.
- (k) Other appropriate social and economic circumstances? None were identified.
- 2. Secondary and cumulative impacts on the physical environment and human population: No secondary or cumulative impacts were identified at this time.

 Developments of this type are bound to cause impacts but it is not known when these impacts will appear.
- **3. Describe any mitigation/stipulation measures:** No mitigations measures are justified at this time. They may be required for future development.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: Since the wells are drilled and the infrastructure completed, no other alternatives were considered.

PART III. Conclusion

Based on the significance criteria evaluated in this EA, is an EIS required? No

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action: Because no secondary or cumulative impacts were identified as a result of this action, the EA is the appropriate level of analysis for the action.

Name of person responsible for preparation of EA:

Name: Wes McAlpin

Title: Water Resources Specialist

Date: October 1, 2007